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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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David J. Gaskey
Carlson, Gaskey & Olds
400 W. Maple, Suite 350
Birmingham, MI 48009

EXAMINER

ELKASSABGI, HEBA

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 04/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/740,231

Applicant(s)

GIERAS ET AL.

Examiner

Heba Elkassabgi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/20/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-23 is/are allowed.
- 6) ☒ Claim(s) 10, 11, 14, 15, 16 and 21 is/are rejected.
- 7) ☒ Claim(s) 13 and 17-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

Claim 10 is objected to because of the following informalities: The statement of claim 10 in which "the stator and rotor being supported relative rotary motion between the rotor and stator", is not stated in a manner in which the examiner fully understands what the applicant is claiming. The is advised by the examiner for the applicant to clarify the claim language. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The bonding agent needs to be disclosed in a full, exact and clear and concise manner in order for the examiner to fully understand exactly the type of bonding agent that the applicant is claiming.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Lange (U.S. Patent 5289072).

Lange illustrates in Figure 1 a motor having a stator with first and second stator core portions (6 and 7), in which a coil (winding)(8) is situated between the core portions (6 and 7) with at least part of an axial surface of the coil (winding)(8) is covered by the core portions (6 and 7). The stator core portions (6 and 7) are of a generally annular ring that have a plurality of circumferentially spaced projections that project radially inward from the ring. Additionally, a rotor (2) having a core (12) and a plurality of magnets (13). In which the stator and a rotor are supported in a relative rotary motion, and that the plurality of magnets (13) of the rotor (2) interact with the stator core portions (6 and 7) during relative rotary motion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 and 21 are rejected under 35 U.S.C.103 (a) as being unpatentable over Lange (U.S. Patent 5289072) and further in view of In re Leshin.

Lange illustrates in Figure 1 a motor having a stator with first and second stator core portions (6 and 7), in which a prewound coil (winding)(8) is situated between the core portions (6 and 7) with at least part of an axial surface of the coil (winding)(8) is covered by the core portions (6 and 7). A rotor (2) having a core (12) and a plurality of magnets (13). In which the stator and a rotor are supported in a relative rotary motion, and that the plurality of magnets (13) of the rotor (2) interact with the stator core portions (6 and 7) during relative rotary motion. However Lange does not disclose the material of the stator core portions being of sintered powder material.

Lange discloses the claimed invention except for the material choice of the stator core portions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose a suitable material for the stator core portions, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claims 11 and 12 are rejected under 35 U.S.C.103 (a) as being unpatentable over Lange (U.S. Patent 5289072) and further in view of Weh (U.S. patent 5051641).

Lange illustrates in Figure 1 a motor having a stator with first and second stator core portions (6 and 7), in which a prewound coil (winding)(8) is situated between the core portions (6 and 7) with at least part of an axial surface of the coil (winding)(8) is covered by the core portions (6 and 7). A rotor (2) having a core (12) and a plurality of magnets (13). In which the stator and a rotor are supported in a relative rotary motion, and that the plurality of magnets (13) of the rotor (2) interact with the stator core portions (6 and 7) during relative rotary motion. However Lange does not disclose the support members.

Weh illustrates in Figure 4 a motor in which a plurality of magnetic stator core portions (EI a and EIb) are partially enclosed on the outward axial surfaces of the core portions by two support structures (casing)(ZGa and ZGb), in order to provide magnetization toward the axis of movement.

It would have been obvious to one of ordinary skill in the art to combine the motor structure of Lange and that of the casing of Weh in order provide the axis of movement by way of magnetization.

Claim 15 is rejected under 35 U.S.C.103 (a) as being unpatentable over Lange (U.S. Patent 5289072) and further in view of von Zwegghergk.

Lange illustrates in Figure 1 a motor having a stator with first and second stator core portions (6 and 7), in which a prewound coil (winding)(8) is situated between the core portions (6 and 7) with at least part of an axial surface of the coil (winding)(8) is covered by the core portions (6 and 7). A rotor (2) having a core (12) and a plurality of magnets (13). In which the stator and a rotor are supported in a relative rotary motion, and that the plurality of magnets (13) of the rotor (2) interact with the stator core portions (6 and 7) during relative rotary motion. However Lange does not disclose the laminated core portions.

von Zwegghergk illustrates in figures 5a and 5b that the stator core portions are of laminated sheet metal in order to produce a higher yield of efficiency

It would have been obvious to one of ordinary skill in the art to combine the structure of the motor of Lange with the structure of the stator cores of von Zwegghergk in order to acquire a higher yield of efficiency

Allowable Subject Matter

Claims 22-23 are allowed.

Claims 13,17,18,19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heba Elkassabgi whose telephone number is (703) 305-2723. The examiner can normally be reached on M-Th (6:30-3:30), and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3432 for After Final communications.

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